

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Please cancel claims 1-7 without prejudice or disclaimer. Please add the following new claims 8-40.

Listing of Claims:

1.-7. Cancel

8. (New) A method for fine machining a cylindrical inner surface, in particular a cylinder running surface, which has materials of different hardnesses in the axial direction, comprising the following steps:

pre-turning of the cylindrical inner surface, with at least one softer area of the cylindrical inner surface being pre-turned to a greater diameter than at least one harder area, and

honing of at least the harder area down to the diameter level of the softer area.

9. (New) The method as claimed in claim 8, comprising finish honing the harder area and the softer area to a final dimension.

10. (New) The method as claimed in claim 9, wherein a radial removal of material by the finish-honing is less than 10µm.

11. (New) The method as claimed in claim 9, wherein the harder area and the softer area are finish-honed by different honing stones.

12. (New) The method as claim in claim 10, wherein the harder area and the softer area are finish-honed by different honing stones.

13. (New) The method as claimed in claim 8, wherein turning grooves or honing grooves remain in the softer area after the honing of the harder area.

14. (New) The method as claimed in claim 9, wherein turning grooves or honing grooves remain in the softer area after the honing of the harder area.

15. (New) The method as claimed in claim 10, wherein turning grooves or honing grooves remain in the softer area after the honing of the harder area.

16. (New) The method as claimed in claim 11, wherein turning grooves or honing grooves remain in the softer area after the honing of the harder area.

17. (New) The method as claimed in claim 12, wherein turning grooves or honing grooves remain in the softer area after the honing of the harder area.

18. (New) The method as claimed in claim 8, wherein the harder area is pre-turned down to the diameter of the softer area in a transitional area between the softer area and the harder area.

19. (New) The method as claimed in claim 9, wherein the harder area is pre-turned down to the diameter of the softer area in a transitional area between the softer area and the harder area.

20. (New) The method as claimed in claim 10, wherein the harder area is pre-turned down to the diameter of the softer area in a transitional area between the softer area and the harder area.

21. (New) The method as claimed in claim 11, wherein the harder area is pre-turned down to the diameter of the softer area in a transitional area between the softer area and the harder area.

22. (New) The method as claimed in claim 12, wherein the harder area is pre-turned down to the diameter of the softer area in a transitional area between the softer area and the harder area.

23. (New) The method as claimed in claim 13, wherein the harder area is pre-turned down to the diameter of the softer area in a transitional area between the softer area and the harder area.

24. (New) The method as claimed in claim 8, wherein a subsequent chemical treatment of the surface takes place only in the harder area.

25. (New) The method as claimed in claim 9, wherein a subsequent chemical treatment of the surface takes place only in the harder area.

26. (New) The method as claimed in claim 10, wherein a subsequent chemical treatment of the surface takes place only in the harder area.

27. (New) The method as claimed in claim 11, wherein a subsequent chemical treatment of the surface takes place only in the harder area.

28. (New) The method as claimed in claim 12, wherein a subsequent chemical treatment of the surface takes place only in the harder area.

29. (New) The method as claimed in claim 13, wherein a subsequent chemical treatment of the surface takes place only in the harder area.

30. (New) The method as claimed in claim 18, wherein a subsequent chemical treatment of the surface takes place only in the harder area.

31. (New) A method of making an engine cylinder assembly comprising:

 casting a cylinder casing with a cylindrical inner surface from a material with cylinder casing hardness,

inserting a cylinder liner into the cylinder casing to line an axial portion of the casing cylindrical inner surface, said cylinder lining material having a different hardness than said cylinder casing hardness,

pre-turning of the cylindrical inner surface formed by the cylinder casing and cylinder lining with at least one softer area of the surface being pre-turned to a greater diameter than a harder area, and

honing of at least the harder area down to a diameter level of the softer area.

32. (New) A method according to claim 31, wherein said cylinder casing material is softer than said cylinder liner material.

33. (New) A method according to claim 32, comprising finish honing the harder area and the softer area to a final dimension.

34. (New) A method according to claim 33, wherein a radial removal of material by the finish-honing is less than 10 μ m.

35. (New) A method according to claim 34, wherein the harder area and the softer area are finish-honed by different honing stones.

36. (New) A method according to claim 31, wherein turning grooves or honing grooves remain in the softer area after the honing of the harder area.

37. (New) A method according to claim 33, wherein turning grooves or honing grooves remain in the softer area after the honing of the harder area.

38. A method according to claim 32, wherein the harder area is pre-turned down to the diameter of the softer area in a transitional area between the softer area and the harder area.

39. (New) A method according to claim 33, wherein the harder area is pre-turned down to the diameter of the softer area in a transitional area between the softer area and the harder area.
40. A method according to claim 32, wherein a subsequent chemical treatment of the surface takes place only in the harder area.